IN THE CLAIMS:

Claims 1-22, 24-26, 31, 32, 36, 37, 42-49, 52 and 53 were previously cancelled. Claims 23, 27, 33, 35 and 40 have been amended herein. All of the pending claims are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

1.-22. (Cancelled)

23. (Currently amended) A sponge liner for use in a sponge core barrel assembly, the sponge core barrel assembly including an inner barrel assembly formed of a first material and having a bore extending therethrough, the sponge liner comprising:

a tubular sleeve having a longitudinal axis, formed of a second material and having an outer cylindrical surface sized and configured to be slidably disposed in the bore of the inner barrel assembly and an inner cylindrical surface, the outer cylindrical surface and the inner cylindrical surface being on opposing sides of a wall having a thickness, the tubular sleeve further including at least one groove configured in a helix about the inner cylindrical surface or extending circumferentially along the inner cylindrical ~~surface ,~~ surface, formed in the inner cylindrical surface and extending into the thickness of the wall, the at least one groove having a cross-sectional shape; and

an annular sponge layer formed of a material adapted to absorb at least one specified reservoir fluid, the annular sponge layer including an interior cavity and an outer cylindrical surface secured to the inner cylindrical surface of the tubular sleeve, the annular sponge layer extending into the at least one ~~groove.~~ groove.

24. (Previously presented) The sponge liner of claim 22, wherein the cross-sectional shape of the at least one groove is a dove-tail shape.

25. (Previously presented) The sponge liner of claim 22, wherein the second material comprises a material identical to the first material or a material exhibiting a rate of thermal expansion substantially equivalent to a rate of thermal expansion of the first material.

26. (Previously presented) The sponge liner of claim 22, further comprising a plurality of perforations extending through the tubular sleeve.

27. (Currently amended) A sponge liner for use in a sponge core barrel assembly, the sponge core barrel assembly including an inner barrel assembly formed of a first material and having a bore extending therethrough, the sponge liner comprising:

a tubular sleeve having a longitudinal axis, formed of a second material and having an outer cylindrical surface sized and configured to be slidably disposed in the bore of the inner barrel assembly and an inner cylindrical surface, the outer cylindrical surface and the inner cylindrical surface being on opposing sides of a wall having a thickness, the tubular sleeve further including at least one groove formed in the inner cylindrical surface and extending into the thickness of the wall, the at least one groove having a cross-sectional ~~shape; and~~ shape;

an annular sponge layer formed of a material adapted to absorb at least one specified reservoir fluid, the annular sponge layer including an interior cavity and an outer cylindrical surface secured to the inner cylindrical surface of the tubular sleeve, the annular sponge layer extending into the at least one groove; and

a shaped contour extending in nonperpendicular relationship to the longitudinal axis of the tubular sleeve on at least one end of the sponge liner, the shaped contour configured to mate with a correspondingly shaped contour on an end of a second, adjacent sponge liner, wherein the shaped contour on the sponge liner and the correspondingly shaped contour on the second sponge liner are cooperatively configured to provide an interlocking end-to-end connection between the sponge liner and the second sponge liner.

28. (Previously presented) The sponge liner of claim 27, wherein the shaped contour on the at least one end of the sponge liner and the correspondingly shaped contour on the end of the second sponge liner each comprise a bevel contour.

29. (Previously presented) A sponge liner for use in a sponge core barrel assembly, the sponge core barrel assembly including an inner barrel assembly formed of a first material and having a bore extending therethrough, the sponge liner comprising:

a tubular sleeve having a longitudinal axis, formed of a second material and having an outer cylindrical surface sized and configured to be slidably disposed in the bore of the inner barrel assembly and an inner cylindrical surface, the outer cylindrical surface and the inner cylindrical surface being on opposing sides of a wall having a thickness, the tubular sleeve further including at least one groove formed in the inner cylindrical surface and extending into the thickness of the wall, the at least one groove having a cross-sectional shape;

an annular sponge layer formed of a material adapted to absorb at least one specified reservoir fluid, the annular sponge layer including an interior cavity and an outer cylindrical surface secured to the inner cylindrical surface of the tubular sleeve, the annular sponge layer extending into the at least one groove; and

a longitudinally extending layer of webbing material disposed in the annular sponge layer.

30. (Previously presented) The sponge liner of claim 29, wherein the longitudinally extending layer of webbing material is disposed in the annular sponge layer at a location proximate an interior surface thereof bounding the interior cavity.

31. (Cancelled)

32. (Cancelled)

33. (Currently amended) A sponge liner for use in a sponge core barrel ~~assembly,the~~ assembly, the sponge core barrel assembly including an inner barrel assembly having a bore extending therethrough, the sponge liner comprising:

a longitudinally extending tubular sleeve having an inner cylindrical surface and an outer cylindrical surface sized and configured to be slidably disposed in the bore of the inner barrel assembly;

an annular sponge layer formed of a material adapted to absorb at least one specified reservoir fluid, the annular sponge layer including an interior cavity and an outer cylindrical surface secured to the inner cylindrical surface of the tubular sleeve; and

a longitudinally extending layer of webbing material disposed in the annular sponge layer about at least a portion of a circumference of the annular sponge layer.

34. (Previously presented) The sponge liner of claim 33, wherein the layer of webbing material is disposed in the annular sponge layer at a location proximate an interior surface thereof bounding the interior cavity.

35. (Currently amended) An integrated sponge barrel for use in a sponge core barrel apparatus, comprising, prior to disposition of a core sample therein:

at least one longitudinally extending inner tube section having an inner cylindrical ~~surface; and~~ surface;

an annular sponge layer constructed of a material adapted to absorb at least one specified reservoir fluid, the annular sponge layer including an interior cavity and an outer cylindrical surface secured to the inner cylindrical surface of the at least one inner tube section; and

at least one groove formed in the inner cylindrical surface and extending into a thickness of a wall of at least one inner tube section, the at least one groove having a cross-sectional shape, configured in a helix or extending circumferentially along the inner cylindrical surface of the at least one inner tube section, the annular sponge layer extending into the at least one groove about the inner cylindrical surface of the at least one inner tube section;

wherein the at least one longitudinally extending inner tube section is sized and configured for direct disposition in an outer barrel assembly without a surrounding inner barrel.

36. (Cancelled)

37. (Cancelled)

38. (Previously presented) The integrated sponge barrel of claim 35, wherein the cross-sectional shape of the at least one groove is a dove-tail shape.

39. (Previously presented) The integrated sponge barrel of claim 35, further comprising a plurality of perforations extending through the at least one inner tube section.

40. (Currently amended) An integrated sponge barrel for use in a sponge core barrel apparatus, comprising, prior to disposition of a core sample therein:

at least one longitudinally extending inner tube section having an inner cylindrical ~~surface; and~~ surface;

an annular sponge layer constructed of a material adapted to absorb at least one specified reservoir fluid, the annular sponge layer including an interior cavity and an outer cylindrical surface secured to the inner cylindrical surface of the at least one inner tube section; and

a longitudinally extending layer of webbing material disposed in the annular sponge layer;

wherein the at least one longitudinally extending inner tube section is sized and configured for direct disposition in an outer barrel assembly without a surrounding inner barrel.

41. (Previously presented) The integrated sponge barrel of claim 40, wherein the longitudinally extending layer of webbing material is disposed in the annular sponge layer at a location proximate an interior surface thereof bounding the interior cavity.

42.-49. (Cancelled)

50. (Previously presented) A method of reducing friction between a core sample and an interior wall of a tubular, longitudinally extending inner barrel of a core barrel assembly, at least a portion of the interior wall comprising a layer of sponge material adapted to absorb at least one specified reservoir fluid, the method comprising disposing a longitudinally extending layer of webbing material in the layer of sponge material.

51. (Previously presented) The method of claim 50, further comprising disposing the longitudinally extending layer of webbing material in the layer of sponge material at a location proximate an interior surface thereof.

52. (Cancelled)

53. (Cancelled)